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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,603	12/05/2003	Philippe Le Biez	246178US0	7522

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MAI, NGOC LAN THI

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,603

Applicant(s)

LE BIEZ ET AL.

Examiner

Ngoclan T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 9, 10, and 15 rejected under 35 U.S.C. 102(b) as being anticipated by EP 486319 A.

EP486319 A disclosed coating material comprising aluminum alloy powder and a resin component, wherein the aluminum alloy powder is comprised of an amorphous aluminum alloy consisting essentially of from 83 to 91% Al, from 0.5 to 5% of Ca and from 8 to 12% of Ni, see abstract. EP disclosed an alloy powder having the composition of 88% Al, 2% of Ca and 10% of Ni and a resin component of polyester type. See page 4, lines 53-56 and lines 30-32. The coating material taught by EP read on the claimed powder material.

3. Claims 1, 3-5, 9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1010861 A2.

EP 1010861 disclosed a powder for providing an abradable layer on an air seal for use in gas turbine engine comprising an aluminum-silicon alloy powder and methyl methacrylate powder, which is an organic powder. EP 1010861 taught that the aluminum-silicon alloy powder is a blended powder composed of in weight percent

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between about 10-14 silicon, balance aluminum and small amounts of other elements, which include up to about 0.15 Mn, col. 5, lines 33-58. EP 1010861 taught that the layer includes between 70-95 weight percent aluminum powders and between 1-25 weight percent filler material which is the organic powder, col. 6, lines 30-39 and line 55.

4. Claims 1, 3, 6, 7, 8, 9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mosser.

Mosser disclosed a coating composition comprising aluminum powder, which includes aluminum alloy such as aluminum manganese. See col. 3, line 39 to col. 6, line 37. Mosser also taught other metal powders such as Ni, Co, Si, Zn, and Mg, refractory compound such as BN, and lubricant such as molybdenum disulfide could be added to the aluminum powder to form coating to components such as seal having improved erosion, corrosion and chemical corrosion resistance. See col. 6, line 43-68 and col. 8, lines 8-47. Mosser taught that the coating compositions include a binder and any binder known in the metallurgical coating art may be used. See col. 9, lines 38-40. Mosser taught organic binder, col. 10, lines 18-20, which reads on the organic powder of claim 3.

With regarding claim 7, Mosser taught that the proportion of other compounds mixed with the aluminum powder depends on the particular application intended for the coating but generally should not exceed that proportion which would detract from the principal benefits obtained in accordance with the invention, preferably up to 25% based on total aluminum content, col. 7, lines 1-9.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 486319 A.

EP 486319 A disclosed the coating material comprising the metal powder substantially as claimed. The difference between the claim and EP 486319 A is that the claim requires that manganese or calcium is from 5% to 20% in the metal powder.

However since EP 486319 A taught that the upper range of Ca can be 5% by weight, it have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range (5%), from the broader range disclosed EP 486319 because EP 486319 finds that calcium in the entire disclosed range has a suitable utility. --- Note: Even if a reference teaches a preferred range within a broader range, it still does not "teach away" from the claimed invention. See MPEP 2123.

7. Claims 12-14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the


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base claim and any intervening claims. The claims which requires that the metal powder is an AlMn5 alloy which is not taught or rendered obvious by the cited prior art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 7:30-4:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ngoclan T. Mai
Primary Examiner
Art Unit 1742

n.m.